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# An Assessment of TV Consumers' Awareness of Digital Migration Process in Enugu Metropolis

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#### Abstract

This research assessed the level of awareness of digital migration process among TV consumers in Enugu metropolis. The study drew on the theoretical insights of Diffusion of Innovation theory to explain the diffusion path of digital migration process. The study adopted survey method employing questionnaire to collect data from respondents. Using multi-stage sampling technique, the research was guided by three research objectives and research questions respectively. The study found low level of awareness of digital migration process among residents of Enugu metropolis. Discontented with the current TV viewing experience, the respondents showed favourable disposition to digital migration and expressed willingness to explore new TV viewing experience it presents. The research established the viability potentials for the adoption of digital broadcasting among residents of Enugu metropolis as respondents acknowledged that favourable testimonial on impressive functioning of digital broadcasting from a reliable source would further encourage them to embrace the technology. Given the centrality of awareness to the diffusion process, this paper recommended well-designed sensitisation campaigns to educate Nigerians on digital migration process for a successful digital roll-out. **Keywords:** digitisation, analogue, broadcasting, TV, switch-over, Nigeria.

#### 1.1 Introduction

At the International Telecommunications Union's (ITU) Regional Radio-communication Conference (RRC-06) in Geneva, Switzerland in June 2006, all countries of Europe, Africa, Middle East and the Islamic Republic of Iran agreed to a treaty to migrate from analogue to digital broadcasting on or before 17th June, 2015 (Olagoke, 2015; Olalere et al, 2013; Berger, 2012). Berger (2012) explains that 30 of Africa's 54 states are actually given up till 2020 in the same treaty – that is, nearly two-thirds of the continent. Though Nigeria is part of thirty African countries given an extra five-year grace period to migrate to digital broadcasting (Olalere et al, 2013), the country commenced her digitisation process as early as 2007 by setting 17th June, 2012 as deadline for a complete switch-over of all broadcast channels from analogue to digital (Ihechu and Uche, 2012). On 22nd December, 2016, Nigeria made a huge leap in her digital migration process following the launch of the Abuja phase of the Digital Switch-over (DSO) by President Muhammadu Buhari, signalling the commencement of the full roll-out of digital broadcasting across the federal capital city (Adaramola, 2016). Though, there have been pilot launches of the scheme in Jos, Plateau State on June 30th, 2014, overseen by the then Minister of Information, Mr. Labaran Maku and in April 2016, supervised by the current Minister of Information and Culture, Alhaji Lai Muhammed (Okonji, 2017), Abuja launch of digital switch-over by President Buhari represented Nigerian government's involvement in the digitisation process at the highest level. With few weeks to the June 2017 new deadline for digital switch-over in Nigeria, this paper examines the level of awareness among television consumers in Enugu metropolis of the digital migration process. In view of the fact that a policy such as this requires the co-operation of all stakeholders, including the consumers, for its success, ascertaining the level of awareness of consumers relating to digital migration becomes a vital subject of inquiry. This study proceeds by outlining an overview of digital migration, sketch an account of digitisation in Nigeria, review relevant studies on digitisation, outline the theoretical framework that informed this study and methodology guiding the research as well as discussion of findings and conclusion.

## 1.2 An Overview of Broadcast Digital Migration

The wave of digitisation is sweeping across the globe driven by ITU's decision to digitise the broadcast industry. Though not all countries are signatories to ITU's digitisation treaty as seen in South/Latin America and Asia (APC/Balancing Act, 2011), it has become a general trend in broadcasting (Mbatha and Lesame, 2014). Digitisation is defined as a technological process through which data, graphics, sounds and images are converted into a digital binary language (zeroes and ones) for computer use (Suarez-Candel, 2007; Okorie, 2008). Digitisation, Germano (2007) explains, makes for the convergence of content and also of platforms, as digital signals can now be re-transmitted through common infrastructures, whether based on radio waves, optical cables or satellite broadcasts. Digital migration is the transition from analogue to digital broadcasting (Berger, 2010). Njogu (2016) observes that digital broadcasting is transmitted on radio frequencies through terrestrial space just like the standard analogue television, with the main difference being the use of multiplex transmitters to allow reception of multiple channels on a single frequency range (such as a UHF or VHF channel) known as sub-

channels. Unlike analogue coding method which transforms images and sounds into an electric signal in a proportional way to their natural physical characteristics, Suarez-Candel (2007) explains that the concept of digitisation means the use of a logical binary code which translates images and sounds into discrete values, which are used to build the radio electrical waves afterwards.

Digitisation of broadcasting is a phased process involving content production, the transmission and reception. The production phase, Suarez-Candel (2007) explains, concerns entirely the professional realm where the sale of equipment and daily operational routines are the thrust of discussion. In Nigeria, broadcast and studio equipment are increasingly being converted to digital ones largely driven by growing obsolescence of analogue studio equipment (APC/Balancing Act, 2011). It is argued that ITU's treaty, to a great extent, focuses on the transmission and reception phase of the digitisation exercise. As Suarez-Candel (2007) observes, the transmission and reception phase has significant implications for businesses, politics and society due to its wide-ranging impact on the industry.

There is appreciable degree of unanimity among scholars that digital broadcasting has a number of advantages over analogue broadcasting, thereby giving impetus for its adoption (Colapinto and Papandrea, 2006; Dhiman et al, 2016; Berger, 2012; Suarez-Candel 2007). For Colapinto and Papandrea (2006), digital broadcasting provides the consumers with improved audiovisual reception devoid of several quality defects characteristic of analogue transmission such as ghosting and interference between signals. As Colapinto and Papandrea (2006) note, 3-4 different television services could be accommodated in a single analogue channel space because of picture compression made possible through digitisation thus freeing up the spectrum for other purposes. Berger (2010b) explains that it was for this reason that digital migration is targeting television ahead of radio and it is prioritising the transmission stage over the production and reception stages. Dhiman et al (2016) argue that digital transmission allows more channels to be transmitted with better image quality, sound quality and enhanced interactive applications. It is also said to improve the coverage of digital television transmission (Olalere et al, 2013). Economically, Mbatha and Lesame (2014) contend that digitisation makes for economic efficiency in broadcasting as conversion to digital forms of storage, editing and retrieval saves time and labour.

Consequently, various parts of the world are at different stages of migrating from analogue to digital broadcasting. A significant number of countries, particularly in Europe, America and some part of Asia had already achieved digital migration as early as 2012 (Endong, 2015; Colapinto and Papandrea, 2006; Shin and Song, 2012). In Africa, the migration process is generally moving slowly with varying degrees of successes and failures. Mauritius blazed the trail in digital migration in Africa (Berger, 2010). The migration provided both negative and positive lessons for other African countries. One downside of the transition process was the adoption of the approach that allowed an open-market for the importation and sale of Set Top Boxes (STBs). Berger (2010b) notes that this resulted in variety of boxes in the country, many of which do not provide quality service with attendant poor experience of digital television for the populace. Again, insufficient content to fill up the channels made the migration problematic. Berger (2010) however, pointed out that one positive aspect is that the nation has migrated from analogue to digital broadcasting despite teething problems which will hopefully be surmounted with time (Berger, 2010b). Tanzania, as Njogu (2016) observes, had a fairly successful migration process as it switched off analogue transmission on 31st December, 2012. Unlike the disruptions witnessed in Mauritius, the success factor in Tanzanian case has been the clarity and firmness of Tanzania Communication Regulatory Authority (TCRA) and the government in midwifing the process (Schumann, 2013). In Kenya, the digital switch-over which happened on 17th June, 2015 led to 1.3 million Kenyans unable to watch television, a situation partly attributed to lack of thorough consumer awareness (Njogu, 2016). Currently, South Africa is implementing a short dual illumination period, that is, broadcasting both analogue and digital signals so as to enable broadcasters to phase in the digital signals and to give consumers time to procure STBs (Mbatha and Lesame, 2014). Though, most African countries committed to migrating to digital broadcasting by 2015 (Njogu, 2016), many of them, including Nigeria, failed to meet that deadline (Okonji, 2015).

## 1.3 Digital migration process in Nigeria: the Journey so far

Like many other country, Nigeria commenced her migration process shortly after the Geneva 2006 treaty. Pursuant to digitisation goals, President Umaru Yar'Adua gave approval for the commencement of the digitisation of the broadcast industry in December, 2007 (Ocholi, 2009). Sequel to the meeting of stakeholders in the industry, the digitisation programme began in earnest in Abuja, Nigeria's capital on 3rd June, 2008 (Ihechu and Uche, 2012). In furtherance of the presidential approval of the programme, the then Minister of Information and Communication, Mr. John Odey inaugurated the Presidential Advisory Committee (PAC) on the transition from analogue to digital broadcasting on 31st October, 2008 to fashion out the modalities that will ensure the broadcast industry in particular and the nation in general, reaped the gains of digitisation (Olalere et al, 2013). The committee was asked to recommend appropriate regulatory mechanism, draft a national broadcasting model, assess the effect of digitisation on consumers and recommend possible government intervention (Olalere et al, 2013). The committee was also mandated to estimate the quantum of expected digital dividend, conduct

environmental impact of digitisation, if any, and recommend measures to be taken and advise government on any action related to seamless digital transition in Nigeria (Olalere et al, 2013). The multi-sectoral nature of the digitisation of the broadcast industry necessitated membership of the committee being drawn from several sectors (Olalere et al, 2013, APC/Balancing Act, 2011). Membership included representatives from the Ministry of Information and Communications, Ministry of Science and Technology, Ministry of Environment, National Broadcasting Commission (broadcasting regulator), Nigerian Television Authority (NTA) – Government-owned National TV Broadcaster, Federal Radio Corporation of Nigeria (FRCN) – Government-owned National Radio Broadcaster, National Film and Video Censors Board (NFVCB), Consumer Protection Council (CPC), Nigerian Communications Satellite Ltd (NIGCOMSAT, Nigerian Film Corporation, Nigerian Communications Commission, Nigerian Copyright Commission and a host of Private broadcasting stations (Olalere et al, 2013).

The committee headed by Engr. Isaac Wakombo, a former Director of Engineering at NTA, submitted its report to the then Minister of Information and Communications, Prof. Dora Akunyili in December, 2009. Characteristic of unnecessary bureaucracy in government circles in Nigeria, the report was not made public until 2012 which meant that 2012 deadline was no longer feasible (Okonji, 2017). Having failed to meet the 2012 deadline, Okonji (2017) explains that the federal government in December 2012 inaugurated a 14-man team tagged "Digiteam Nigeria", with Mr. Edward Amana as the Chairman to drive the process of digital migration. In 2011, the Ministry of Information and Communication was bifurcated into two with Mr. Labaran Maku heading the Information ministry while Ms. Omobolaji Johnson took charge of Ministry of Communications (Olalere et al, 2013). Consequently, the two ministers had to restart the digitisation process afresh with 2015 set as the new deadline (Olalere et al, 2013). Justifying the rationale for the new date, Mr. Maku explained that government's decision was borne out of the need to ensure a smooth transition to digital broadcasting (Olalere et al, 2013). Again, due to lack of political will, the Digiteam did not receive the required funding to enable it actualise the task (Okonji, 2017). It was not a surprise that on 17th June, 2015, Nigeria, like many other African countries, failed to transit to digital broadcasting (Nigerian Pilot, 2017). As result, ITU has set June 2017 deadline for Nigeria to switch-off analogue broadcasting (Okonji, 2017). The present administration has assured that the nation will not miss the 2017 deadline and has commenced pilot launch of digital broadcasting in Jos and Abuja (Okonji, 2017). With few weeks to the 20th June, 2017, it remains to be seen if Nigeria will be this time lucky.

## **1.4 Literature Review**

Scholarship on digitisation of broadcasting is bifurcated into two groups: one that examines the pre-migration scenario with a view to identifying possible challenges and proffering solutions; and the other that focuses on post-migration era aimed at drawing lessons for countries yet to digitise broadcasting. As to be expected, most of the studies outside Africa are concerned with the latter. For instance, Colapinto and Papandrea (2006) appraised how the digital TV conversion policies and progress in the UK, US, Australia and Italy employed different processes to achieve the desired switch-off. Confronted with lower than expected take up rates, the authors noted that the UK and Italy adopted sequential regional switch-off in achieving national switch-off while the US and Australia opted for national switch-off. In studying the transformations of the television system due to digitisation, Suarez-Candel (2007) identified the leadership role of public broadcasters during digital migration as an important factor for public policy. Hart (2010) while chronicling digital migration process in the US argued that numerous decisions and policy inconsistencies made the process confusing and complicated for those concerned. Reflecting on digital migration process in South Korea, Shin and Song (2012) and Yoon (2013) gave a slightly contradictory appraisal. Shin and Song's (2012) study revealed that successful Korean TV transition was the product of a proactive strategy by industry stakeholders and the Korean government top-down policy supporting the process. The verdict from Yoon's (2013) study was that South Korea's digital switch-over was a partial success, stressing the need for a central hub liaising between the government, the broadcasters and the television manufacturers to communicate and increase public awareness to overcome the remaining challenges. Njogu (2016) who investigated the reason for 1.3 million Kenyans' inability to migrate to digital broadcasting attributed the situation to high cost of STB and inadequate technological preparedness of the consumers.

The pre-migration studies are strikingly similar. For instance, Ihechu and Uche (2012), Olagoke (2015) and Olalere et al (2013) examined the challenges of migrating from analogue to digital broadcasting. These studies identified the challenges of skilled manpower, power supply, lack of awareness of the consumers regarding migration, technical and financial constraints as problems facing the realisation of digitisation of the broadcast industry. They emphasised the need to educate stakeholders on the gains of digital migration, promulgation of laws to compel digital equipment manufacturers to set up plants in Nigeria, government subsidisation of STBs and digital equipment as well as engaging in capacity-building efforts to equip Nigerians to function in the new digital environment. Similarly, a study conducted in South Africa, Mbatha and Lesame (2014) examined potential impediments to the adoption of digital television. The authors who identified obstacles to include poverty, lack of awareness, corruption, lack of skilled manpower and lack of government

commitment, argued that addressing these issues hold the key to successful digital broadcasting migration. Endong (2015) examined the strategies introduced by the Nigerian government and other stakeholders in the broadcast industry in achieving the digitisation programme. The study found that though progress has been made in the area of drafting regulatory and operational frameworks, much effort was needed to sensitise Nigerian consumers on the technical and financial implications of digitisation (Endong, 2015). Obot and Inwang (n.d) assessed the level of preparedness among communication practitioners in Uyo for the transition to digital broadcasting. The study established that the practitioners were aware of and were already preparing themselves for digital switch-over. From the literature reviewed so far, the consumer remains the only stakeholder that has been left largely unexplored. Given that the success of any technological innovation depends on its adoption rate (Obot and Inwang, n.d) this study, therefore, seeks to fill this knowledge gap by investigating level of awareness of TV consumers in Enugu metropolis on digital migration process.

# 1.5 Theoretical Framework

This study is anchored on Diffusion of Innovation theory (DOI). DOI relates to the process that occurs as people adopt a new idea, product or service (Kaminski, 2011). Rogers (1995) describes diffusion as a process whereby a product or service designed to bring innovation spread within a population, getting to several adopters. Al-Jabri and Sohail (2012) note that DOI aims at providing explanations on how, why and what rate novel ideas and technology diffuse through cultures. The process starts with the introduction of the innovation to the population and ends with its full adoption (Mapi et al, 2008). According to Rogers (1995), there are five categories of adopters of an innovation, namely innovators, early adopters, early majority, late majority and laggards. Innovators are described as technology enthusiasts requiring the shortest adoption period of all categories (Kaminski, 2011). They are gatekeepers for the next category of adopters covering just 2.5% of the entire adopters (Kaminski, 2011). Seen as visionaries, early adopters serve as the opinion leaders and provide excellent tester subjects to trial of the innovation (Kaminski, 2011). They make up 13.5% of adopters. Kaminski (2011) explains that early majority who function as opinion leaders though late in the process, interact frequently with peers. Representing 34% of adopters, early majority want proven applications recommended by a trusted colleague. The late majority are very cost sensitive, responding to peer pressure and economic necessity (Kaminski, 2011). Late majority who account for 34% of adopters rely on single trusted advisor. According to Kaminski (2011) the laggards are isolated from opinion leaders with their only point of reference being in the past. Accounting for 16% of adopters, laggards want to maintain the status quo and are suspicious of innovations (Kaminski, 2011).

Rogers (1995) notes there are five stages of adoption process. They include awareness, interest, evaluation, trial and adoption stages.

- Awareness: Mapi et al (2008) note that this stage is concerned with the introduction of innovation to a person who does not possess ample information, neither sees the need to get more information nor considers buying or using the product or service.
- Interest: One decides to seek more information about the innovation but does not really know how or if it can be useful in their own life. Mapi et al (2008) explain that this is when the individual decides to get more information to guide his choice.
- Evaluation: This relates to the individual making decisions about the innovation. In this stage, Mapi et al (2008) observe that the individual enquires about the use of the product and the difference it will make. If the innovation appears to be useful to their life, they will try it out.
- Trial stage: At this stage, the product or innovation is used to a limited extent (Mapi et al, 2008).
- Adoption Stage: Here, the decision to adopt a product/innovation is informed by the information gathered in the interest and evaluation stages as well as the outcome of the trial stage (Mapi et al, 2008).

Given that DOI develops predictive account of the diffusion phenomenon that supposedly helps technology implementer's propagate diffusion of selected technologies (Lyytinen and Damsgaard, 2001), this study assesses the level of awareness of digital broadcasting among TV consumers in Enugu metropolis. Finding out the level of awareness is particularly important because awareness prefaces other innovation adoption stages. Establishing the level of awareness of digital broadcasting process in Enugu metropolis will provide a useful insight into the possible rate of adoption when analogue switch off happens.

## 1.6 Objectives of the Study

To assess the level of awareness of the digitisation of the broadcast industry among TV consumers in Enugu metropolis,

To gauge the attitudes of TV consumers towards digital migration,

To ascertain the viability of the adoption of digital broadcasting in Enugu metropolis.

# **1.7 Research Question**

What is the level of awareness of the digitisation of the broadcast industry among TV consumers in Enugu metropolis?

What is the attitude of TV consumers towards buying digitally-compliant equipment for digital broadcast reception?

How viable is the adoption of digital broadcasting among TV consumers in Enugu metropolis?

## 2.1 Methodology

This study adopted survey as its research design. Hansen et al (1998) observe that survey research usually aims at providing empirical data gathered from a population of respondents on a whole range of issues. Though there are different approaches to survey research including telephone, emails, face-to-face interview is chosen for this research because it guarantees a much higher return rate (Akpabio, 2007). Far from being confined to the collection of information about things, surveys are usefully deployed to examining individual opinions, attitudes, level of awareness and behaviours on an array of topics (Hansen et al, 1998). As a basic instrument for survey research, questionnaire was chosen for this study because it standardises and organises the collection of and processing of information (Hansen et al, 1998).

The population for this study consists of 717,291 persons representing three local government areas that make up Enugu metropolis (Enugu south – 198,032, Enugu north – 242, 140 and Enugu east – 277,119) (NPC, 2006). A sample size of 400 was selected, using Taro Yamane (1967) sample size formula represented in the equation below:

 $n = \frac{N}{1+N(e)^2}$ 

where n =Sample size

N = Population

e = Level of precision (0.05) or error margin allowed.

1= Constant Unit

Note: N = 717,291 that is, the population of three local government areas that make up Enugu metropolis (NPC, 2006).

Substituting:  $n = \frac{717,291}{1+717,291(0.05)^2}$ =  $\frac{717,291}{1794,23} = 399.7 = 400$  (Approximately)

The study employed a multi-stage sampling technique in which the sample was clustered into three local governments (Kothari, 2004). Then aided by a table of random numbers, the following areas were selected: Abakpa, Ogui New Layout and Uwani. Again, assisted by a table of random numbers, seven streets each were selected for Abakpa and Ogui New Layout zones because of their relatively large population while six streets were selected for Uwani zone. They are as follows:

Abakpa - College Road, Atani, Imo River, Ikem, Ameshi, Oraukwu and Isieke Streets.

Ogui New Layout - Edinburgh, Obiagu Road, Udorji, Aninwede, Ani, Osadebe and Aku Streets.

Uwani - Amokwe, Ozoanichebe, Eze, Ohafia, Onwudiwe and Boardman Streets.

Twenty copies of the questionnaire were administered to the residents of the each of the selected streets, thereby making a total of 400 respondents. A pilot study was conducted to gather relevant information that enriched the final questionnaire used in this research.

## 3.1 Findings

Out of the 400 copies of questionnaire distributed for this study, 382 were returned amounting to 95.5% response rate.

Demographic	%	%	%	%	%	%	Total
Characteristics							
Age Range	18-29	30-39	40-49	50-59	60 and above		
	(48.4)	(21.4)	(16.2)	(5.2)	(8.8)		100
Sex	Male	Female					
	(62.4)	(37.6)					100
Highest	FSLC	School	OND	Degree/HND	Masters		
Educational		Certificate			and above		
Qualification	(7.4)	(41)	(14)	(31)	(6.6)		100
Estimated Yearly	Below	100,001-	300,001-	500,001-700,	700,000-	1,000,000	
Income	100,000	300,000	500,000	000	1,000,000	and above	
	(53.6)	(20.6)	(11.1)	(3.7)	(4.4)	(6.6)	100
Occupation	Civil	Business	Students	Pensioner			
_	Servant	Person	(35.4)	(2.2)			100
	(13.3)	(49.1)					
Residential Area	Abakpa	Ogui N/L	Uwani				
	(36.9)	(32.4)	(30.7)				100

Table 1. Summar	v of Respondents'	Demographic	Characteristics
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The sample for this study was drawn from Abakpa (36%), Ogui New Layout (32.4%) and Uwani with 30.7%. Majority of respondents were between the ages of 18-29 (48.4%). Following this age range were those between 30-39 years (21.4%), 40-49 years (16.2%), 60 and above (8.8%) and 50-59 years (5.2%). The study recorded more male respondents (62.4%) than female respondents (37.6%). The respondents' highest educational qualification is distributed as follows: First School Leaving Certificate (FSLC) (7.4%), School Certificate (41%), Ordinary National Diploma (OND) (14%), Degree/Higher National Diploma (HND) (31%), Masters and above (6.6%). The respondents' yearly estimated income is as follows: below \$100, 000 (53.6%), \$100, 001 (20.6%), \$300, 001-\$500, 000 (11.1%), \$500, 001-\$700, 000 (3.7%), \$700, 001-\$1, 000, 000 (4.4%) and \$1, 000, 001 and above (6.6%). Majority of respondents were in business (49.1%), followed by students (35.4%), civil servants accounted for 13.3% of respondents while pensioners garnered 2.2%.

Table 2. Sur	nmary of respo	ndents' media	use and views
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	%	%	%	%	%	Total
TV ownership	Yes	No				
	(87.5)	(12.5)				100
Regularity of TV viewing	Often	Scarcely	Not at all			
	(75.6)	(16)	(8.4)			100
Respondents' major source of	TV	Radio	Newspaper	Internet	Personal	
news	(23.6)	(31)	(8.8)	(33.7)	Conversation	
					(2.9)	100
Respondents' major source of	TV	Radio	Newspaper	Internet		
entertainment	(57.2)	(16.2)	(5.2)	(21.4)		100
Respondents' view on TV	Positive	Negative				
reception quality	(31)	(69)				100
What is most dissatisfying to	Visual	Audio				
respondents	Quality	Quality				
	(73.3)	(26.7)				100

Majority of respondents own a TV set (87.5%) while 12.5% of respondents do not. Majority of respondents regularly watch TV (75.6%), 16% of respondents scarcely watch TV while 8.4% do not watch TV at all. When asked about their major source of news, the respondents responded as follows: TV (23.6%), Radio (31%), Newspaper (8.8%), internet (33.7%) and personal conversation (2.9%). The major source of entertainment is in the following order: TV (57.2%), Radio (16.2%), Newspaper (5.2%) and Internet (21.4%). Majority of respondents reported they were not satisfied with the reception quality of their local TV station (69%) while 31% say they are satisfied with its reception quality. About 73.3% of respondents found the visual quality most dissatisfying while 26.7% of respondents say audio quality was most discomforting for them. Majority of respondents were disposed to exploring new TV viewing experience (72.7%) while 27.3% were not.

I able 3. Summary of response				<u> </u>		r
	%	%	%	%	%	Total
Respondents' willingness to exploring new TV viewing experience	Yes (72.7)	No (27.3)				100
Whether respondents have heard about digital switch-over	Yes (39)	No (61)				100
Heard it through which medium?	TV (43.3)	Radio (8.7)	Newspaper (8.7)	Internet (15.6)	Word of mouth (23.7)	100
Got the message through which media content	News stories (87%)	News feature (13%)	TV/Radio jingles	Public service announcement	Newspaper advertisement	100
Whether they know what STB is	Yes (17)	No (83)				100
Acquiring STB is an important investment	Strongly agree	Agree	Strongly disagree	Disagree	Undecided	
	(25)	(24.3)	(6.6)	(8.1)	(36)	100
Would knowing that non- purchase of STB lead to inability to watch TV	Yes	No	Undecided			
make you buy it?	(61.7)	(11.8)	(26.5)			100
Hindrance to the adoption of digital broadcasting	Lack of information on how it	Finance	No need for it	Suspicious of new technology		
	works (41)	(33.9)	(9.6)	(15.5)		100
Would a favourable testimonial from a reliable source on impressive functioning of digital broadcasting	Yes	No	Undecided			
encourage you to embrace the technology?	(69)	(9.6)	(21.4)			100

Table 3. Summary of respondents	s' level of awareness and attitude towards digital migration

Majority of respondents have not heard about digital migration (61%), whereas 39% of respondents have heard about it. Those who heard about it got the message through the following media: TV (43.3%), Radio (8.7%), Newspaper (8.7%), Internet (15.6%) and word of mouth (23.7%). The dominant media content through which respondents got the message was through news stories (87%), 13% got theirs through news features. Majority (83%) of respondents do not know what STB is while 17% say they know what it is. respondents (25%) strongly agreed that acquisition of STB was an important investment to make, 24.3% agreed, 6.6% strongly disagreed, 8.1% disagreed while 36% remained undecided on the matter. When asked whether knowing that non-purchase of STB would lead to inability to watch would make you buy STB, 61.7% of respondents were affirmative, 11.8% responded in negative while 26.5% of respondents remained undecided. Majority of respondents (41%) identified lack of information on how digital broadcasting works as hindrance to the adoption of digital broadcasting, 33.9% of respondents (69%) say a favourable testimonial on impressive functioning of digital broadcasting from a reliable source would enhance the adoption of the technology, 9.6% would not adopt the technology despite the testimonial while 21.4% of respondents remain undecided on the subject.

## **3.2 Discussion of Findings**

# 3.2.1 The extent to which TV consumers in Enugu metropolis have been exposed to digital migration

Majority of TV consumers in Enugu metropolis have not heard about digital switch-over policy of the federal government. A small proportion of the population (39%) say they have heard about the policy. This is at variance with the findings of the study conducted by Obot and Inwang (n.d) in which they reported that media practitioners in Uyo were aware of and preparing themselves towards digital migration. Such study might be

misleading if assumed to be a reflection of the general public since many of respondents are not media practitioners to know the developments in the industry. The observed low level of awareness of digital migration should be a cause for concern for the government because of the centrality of awareness to the diffusion process. Drawing from Rogers (1995) five stages of adoption process, awareness is the first stage that defines the diffusion rate of an innovation. Without the creation of awareness around digital migration, TV consumers will remain oblivious of the new technology and consequently will not show any interest in seeking information relating to new product. TV (43.3%) and word of mouth (23.7%) were the two main channels of disseminating digital migration process. Interestingly, with word of mouth accounting for nearly a quarter of the dissemination, it is indicative of its potential to spread digital broadcasting technology if the government could package the digitisation campaigns in most accessible way. Most (87%) of the respondents who heard about digital migration through the mass media, got the message via news stories while very small proportion (13%) received the message through news feature. Majority (83%) of the respondents admitted that they do not know what STB is whereas 17% of respondents knew what it meant. This could be attributed to the type of media content they got the information from. Since majority of the respondents got the message through news stories, it is unlikely that such media content can afford the opportunity of explaining in detail digital migration process. The above lends credence to the call for more concerted effort at addressing poor dissemination of digital migration process through easy-to-understand messages delivered to TV consumers preferably through TV.

## 3.2.2 The attitudes of TV consumers in Enugu metropolis towards digital migration.

Though digitisation of broadcast industry holds great promise for freeing up the spectrum for other purposes, creating job opportunities for content producers, the most relevant one for an average TV consumer, it could be argued, relates to the reception quality of TV. The study shows that majority (69%) of respondents are not impressed with the reception quality of their local TV station. Of the 69% unimpressed with reception quality of their local TV station, 73% of them found TV visual quality most discomforting for them. Given that majority of respondents were not satisfied with the reception quality of local TV station, they were asked if they are disposed to exploring new TV viewing experience. Majority (72.7%) of respondents expressed their willingness to embrace new TV viewing experience such as one offered by the digitisation of broadcast industry. It could be argued that majority of the respondents have a favourable disposition to digital migration having been unimpressed with the current TV viewing experience and having shown the willingness to explore new TV viewing experience. This is particularly heart-warming given that these respondents have not actually been exposed to digital broadcasting. It is hoped that the interest in digital broadcasting would generate the critical mass that would make the diffusion of digital broadcasting possible. Expectedly, this positive disposition would increase as the gains of digital broadcasting become manifest. This goodwill digital broadcasting currently enjoys, it has to be stressed, may fizzle away if the visual and audio quality of digital broadcasting fails to meet the expectation of TV consumers. It is therefore pertinent to emphasise the need for the deployment of the right equipment and contents to ensure successful roll-out of digital broadcasting in Nigeria.

## 3.2.3. The viability of digital broadcasting in Enugu metropolis.

To survey the viability of digital broadcasting in Enugu, the respondents were asked if the acquisition of STB was an important investment to make. Cumulatively, almost half of the respondents (49.3%) saw it as an important investment. Majority (61%) of respondents admitted that the idea of non-purchase of STB would lead to inability to watch TV could make them buy STB. Some respondents (41%) identified lack of information on how digital broadcasting works as a hindrance to the adoption of digital broadcasting, 33.9% attributed it to finance, 9.6% say they found no need for it while 15.5% were suspicious of new technology. Though several studies [see Ihechu and Uche (2012), Olagoke (2015), Olalere et al (2013) and Mbatha and Lesame (2014)] have identified the above as major impediments to digital migration, lack of awareness of the digital migration process remains very central to the spread of digitisation. This is validated by the percentage of respondents who identified it as such. Majority of respondent (69%) believe that a favourable testimonial on impressive functioning of digital broadcasting from a reliable source would enhance the adoption of the new technology. What could be established from the above is that there is strong viability for digital broadcasting in Enugu metropolis. What is required is sensitisation campaign to educate Nigerians about digital broadcasting, its gains and opportunities inherent in it, and subsidise the cost of STBs to make it affordable to the people. It is hoped that those who either found no need for it or are suspicious of new technology may, through awareness campaigns, see the rationale behind digital migration and consequently embrace the new technology.

## 4.1 Conclusion

This study examined the level of awareness among residents of Enugu metropolis on digital migration process. The study found that significant percentage of respondents was unaware of the digitisation of broadcasting in Nigeria. The research established that TV and word of mouth were two major media used in the dissemination of digital migration programme. The study reported smattering knowledge of digitisation process among respondents owing to reliance on new stories which did not guarantee detailed explication of the programme. In

spite of low awareness level of digitisation of broadcasting among residents of Enugu metropolis, the respondents exhibited a favourable disposition to the new technology. Majority of respondents expressed their willingness to purchase STB in order to access TV broadcasting. It was however noted that the goodwill which digital broadcasting enjoys at present may wane in the event that the new technology falls short of expectation, hence the need for the deployment of requisite equipment and content. The study found viability potentials for the adoption of digital broadcasting among residents of Enugu metropolis. Having been largely unimpressed with analogue broadcasting, there is strong appetite for quality broadcasting which digitisation of broadcasting could potentially assure. They consider the purchase of STB an important investment to make. Residents of Enugu metropolis were of the view that a favourable testimonial on impressive functioning of digital broadcasting from a reliable source would further encourage them to embrace the technology. From the foregoing, this study recommends well-designed sensitisation campaigns to educate Nigerians on digital migration, its gains and what an average TV consumer is expected to do in order to enjoy qualitative TV broadcast when broadcast media is fully digitised in Nigeria.

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